

Los Alamos National Laboratory
Environmental Restoration Program
Standard Operating Procedure

No: LANL-ER-SOP-06.16 Rev: 0

Thief Sampler for Dry Powders or Granules

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THIEF SAMPLER FOR DRY POWDERS OR GRANULES

1.0 PURPOSE

This procedure describes the method for using the Thief sampler for dry powders or granules.

2.0 SCOPE

2.1 Applicability

This method is applicable to all site workers using the Thief sampler for dry powders or granules for the Environmental Restoration program.

2.2 Training

The site worker should be familiar with the sampling equipment and must document that he has read and understands this procedure as well as the procedures in Section 1.0, General Instructions.

3.0 DEFINITIONS

N/A

4.0 BACKGROUND AND/OR CAUTIONS

Thief samplers are used for low volume sampling of dry solid waste materials in bags, fiber drums, sacks, or similar containers. This sampler is most useful when the solids are no greater than 1/2 inch (0.6 cm) in diameter or no larger than one-third the width of the slots. A diagram of the Thief sampler is in Attachment A.

The Thief sampler consists of two slotted concentric tubes, usually made of stainless steel or brass. The outer tube has a conical pointed tip that permits the sampler to penetrate the material being sampled. The inner tube is rotated to open and close the sampler. Thief samplers are usually 24 to 100 inches (60 to 100 cm) long by 1/2 to 1 inch (1.27 to 2.54 cm) in diameter.

Site workers preparing for field operations should read and understand the procedures outlined in LANL-ER-SOPs, Section 2.0, Health and Safety in the Field. In addition, site workers should refer to site-specific Operable Unit Health and Safety plans for the particular health and safety equipment to be used.

NOTE: The Thief sampler is not desirable for moist or sticky samples.

5.0 EQUIPMENT

Equipment to implement this procedure is shown in Attachment B.

6.0 PROCEDURE

- A. Coordinate sampling effort with Sample Coordination Facility.
- B. Assemble the necessary equipment.
- C. Decontaminate all equipment prior to beginning and after each use (SOP-02.07, General Equipment Decontamination).
- D. After opening the waste containers, insert the open Thief sampler into the waste to be sampled, obtain the sample, and close the sampler.
- E. Remove the Thief sampler and transfer the sample from the Thief to the sample container. Refer to SOP-01.02, Sample Containers and Preservation for guidance. Reclose the waste container.

6.1 Documentation

- A. Complete the Containerized Waste Sampling forms (SOP-06.15). Use the Daily Activity Log from SOP-01.04, Sample Control and Field Documentation for additional comments.
- B. Complete other appropriate sample forms and labels also found in SOP-01.04.

6.2 Post Sampling Activities

- A. Ensure all equipment is accounted for, decontaminated, and ready for transport.
- B. Make sure all sampling locations are properly documented.
- C. Package all samples for transport to the laboratory according to SOP-01.03, Handling, Packaging and Shipping of Samples.

7.0 REFERENCES

The following procedures are directly associated with this procedure and should be reviewed before field operations:

LANL-ER-SOPs in Section 1.0, General Instructions.
LANL-ER-SOPs in Section 2.0, Health and Safety in the Field.
LANL-ER-SOP-06.15, Coliwasa Sampler for Liquids and Slurries.

EPA. November 1986. "Test Methods for Evaluating Solid Waste", Vol. II: Field Manual Physical/Chemical Methods, Office of Solid Waste and Emergency Response, Washington D.C.

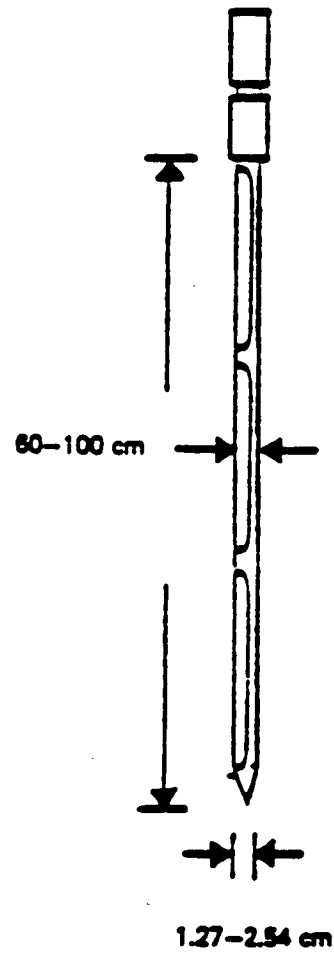
8.0 RECORDS

- A. Completed Containerized Waste Sampling Form**
- B. Completed Chain-of-Custody and Request for Analysis Form**
- C. Daily Activity Log detailing any deviations and any other pertinent information**
- D. Sample Collection Log**

9.0 ATTACHMENT

- A. Thief Sampler diagram**
- B. Equipment and Supplies Checklist for Thief Sampler**

THIEF SAMPLER



EQUIPMENT CHECKLIST FOR THIEF SAMPLING

- _____ Thief Sampler
- _____ sample container(s)
- _____ decontamination equipment
- _____ scrub brush
- _____ pan (stainless steel or glass)
- _____ disposable laboratory gloves
- _____ work gloves
- _____ plastic sheet
- _____ blue ice or equivalent
- _____ cooler
- _____ Daily Activity Log
- _____ Chain-of-Custody/Request for Analysis forms
- _____ Sample Collection Logs
- _____ Variance Logs
- _____ Custody Seals
- _____ Unique Sampling Stickers
- _____ Sample Labels